

## Supplementary Appendix

This appendix has been provided by the authors to give readers additional information about their work.

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## **APPENDIX**

- A. Participating Sites
- B. Telemonitoring Questions, Responses, Frequency and Variance Triggers

### **A. Participating Sites.**

**Baylor University Medical Center**, Dallas, TX, Clyde W. Yancy, MD, Andrew Masica, MD, Sonnya Coultrup; **Bridgeport Hospital**, Bridgeport, CT, Robert Moskowitz, MD, Lindsey Mahon, BS; **Cardiology Consultants of South Florida**, Tamarac, FL, Ricky Schneider, MD, Rochelle McKenzie; **Cardiology Associates**, Mobile, AL, Kenneth M. Burnham, MD; **Cardiology Associates of New Haven**, Guilford, CT, Sandip Mukherjee, MD, Nancy Hinchion, RN, Gail Gagnon, RN, Janet Higgins; **Cardiology Associates Research**, Tupelo, MS, Amit Gupta, MD, Kristin Scruggs, RN; **Cardiology Diagnostics**, St. Louis, MO, George Williams, MD; **Cardiology Specialists**, Westerly, RI, Howard Haronian, MD; **Chabert Medical Center**, **LSU Health System**, Houma, LA, Lee Arcement, MD, MPH, Erika Falgout, RN, BSN; **Cooper Health System**, Camden, NJ, Maritza Cotto, MD, Barbara Cruz; **The Dayton Heart Center**, Dayton, OH, C. David Joffe, MD, Jeff Gluck, RN; **The Emory Clinic**, Atlanta, GA, Andrew Smith, MD, Javed Butler, MD, Gail L. Snell, RN; **Forsyth Medical Center**, Winston-Salem, NC, David Smull, DO, Keishia Rodriguez, Mary Wagmeister, APRN; **Hackensack Heart Failure Program**, Hackensack, NJ, Robert Berkowitz, MD, Susan Mathus, RN; **Heart Clinic of Louisiana**, Marrero, LA, Frederick G. Kushner, MD, Beth Wilson, RN, BSN, Dawne Candies, RN; **Howard University**, Washington, DC, Debra Williams, MD, Melvin Hall; **Indiana Heart Physicians**, Indianapolis, IN, Michael Barron, MD, Amanda Shepler; **Iowa City Heart Center**, Iowa City, IA, Ron Oren, MD, Amy Becker, RN, BS; **Loyola University Medical Center**, Maywood, IL, Alain Heroux, MD, Jean Del Priore, RN; **MetroHealth Medical Center**, Cleveland, OH, Karen Kutoloski, MD, Tani Martin, RN; **Morehouse School of Medicine**, Atlanta, GA, Anekwe Onwuanyi, MD, Adefisayo Oduwole, MD, Joann Cross, RN; **New York University**, New York, NY, Jill Kalman, MD, Cristine Surach, ANP; **Oregon Health & Science University**, Portland, OR, Antony Kim, MD, Liz Cannard, MA; **Piedmont Hospital Research**

**Institute**, Atlanta, GA, Nirav Raval, MD, Melanie Eley, RN; **The Queen's Medical Center**, Honolulu, HI, Todd Seto, MD, Malia Young, RN & May Vawer, RN; **Sentara Cardiovascular Research Institute**, Norfolk, VA, Jaime Murillo, MD, Amy Kanter, RN, BSN; **St. Joseph's Regional Medical Center**, Paterson, NJ, Robert Faillace, MD, Lorraine Marut, ACNP; **St. Luke's Hospital/Mid America Heart Institute**, Kansas City, MO, Anthony Magalski, MD, Jackie Smith, RN, BSN; **Truman Medical Center Cardiology**, Kansas City, MO, Mukesh Garg, MD; **UCLA Harbor Medical Center**, Torrance, CA, Charles McKay, MD; **UC Irvine Medical Center**, Orange, CA, Dawn Lombardo, MD, Beth Michel, RN; **University of Pittsburgh Medical Center**, Pittsburgh, PA, Rene Alvarez, MD, Jessica E. Pisarcik; **Washington University School of Medicine**, St. Louis, MO, Gregory Ewald, MD, Tracy Sutton

### B. Telemonitoring Questions, Responses, Frequency and Variance Triggers.

Frequency	Category	Questions	Responses	Create Variance?
Every day	General Health	1. Compared to yesterday, would you say that you are feeling about the same, better, worse or much worse?	If About the Same, press 1 If Better, press 2 If Worse, press 3 If Much Worse, press 4	<b>YES</b> A variance triggers when the patient responds "Much Worse."
Every day	Heart Failure Symptoms & Weight	1. Have you felt more short of breath in the last day?	Yes, press 1 No, press 2	<b>YES</b> A heart failure variance occurs when:  <ul style="list-style-type: none"> <li>• 2 or more answers are "Yes" for #1, 2, 3, &amp; 4</li> <li>• #5 is "Yes" and patient's weight is below range</li> <li>• Weight is outside of the patient's weight range (range is first weight +/- 3 lbs, adjustable by nurse).</li> </ul>
		2. Have you noticed more swelling in the last day?	Yes, press 1 No, press 2	
		3. Did you wake up short of breath last night?	Yes, press 1 No, press 2	
		4. Did you sleep in a chair, or prop up with pillows more than usual last night?	Yes, press 1 No, press 2	
		5. Have you had any lightheadedness or dizziness in the last day?	Yes, press 1 No, press 2	
		6. What is your weight this morning?	Enter whole number	
Once every 30 days	Depression (PHQ-2)	1. Over the last two weeks, have you been bothered by little interest or pleasure in doing things?	Yes, press 1 No, press 2	<b>YES</b> If the answers to either of the above 2 questions are "Yes," a variance will trigger.
		2. Over the last two weeks, have you been bothered by feeling down, depressed or hopeless?	Yes, press 1 No, press 2	
	Eight Additional Depression Questions <sup>10†</sup>	1. Over the last two weeks, how often have you been bothered by little interest or pleasure in doing things?	If not at all, press 1 If several days, press 2 If more than half the days, press 3 If nearly every day, press 4	When a patient's responses trigger a depression variance (above), the patient will automatically be asked 8 additional screening questions (PHQ-8) and a depression score will be calculated based upon the patient's
		2. Over the last two weeks, how often	If not at all, press 1	

Frequency	Category	Questions	Responses	Create Variance?
		<i>have you been bothered by feeling down, depressed or hopeless?</i>	If several days, press 2 If more than half the days, press 3 If nearly every day, press 4	<p>responses.</p> <p>Depression Score: 0 point = Not at all 1 point = Several times 2 points = More than half the days 3 points = Nearly every day</p> <p>A depression category is then assigned using the patient's total score.</p> <p>Depression Category: 1-4 = Minimal depression 5-9 = Mild depression 10-14 = Moderate depression 15-19 = Moderately severe depression 20-24 = Severe depression</p>
		<i>3. Over the last two weeks, how often have you been bothered by trouble falling or staying asleep, or sleeping too much?</i>	If not at all, press 1 If several days, press 2 If more than half the days, press 3 If nearly every day, press 4	
		<i>4. Over the last two weeks, how often have you been bothered by feeling tired or having little energy?</i>	If not at all, press 1 If several days, press 2 If more than half the days, press 3 If nearly every day, press 4	
		<i>5. Over the last two weeks, how often have you been bothered by poor appetite or overeating?</i>	If not at all, press 1 If several days, press 2 If more than half the days, press 3 If nearly every day, press 4	
		<i>6. Over the last two weeks, how often have you been bothered by feeling bad about yourself, or that you are a failure, or have let yourself or your family down?</i>	If not at all, press 1 If several days, press 2 If more than half the days, press 3 If nearly every day, press 4	
		<i>7. Over the last two weeks, how often have you been bothered by trouble concentrating on things, such as reading the newspaper or watching television?</i>	If not at all, press 1 If several days, press 2 If more than half the days, press 3 If nearly every day, press 4	
		<i>8. Over the last two weeks, how often have you been bothered by moving or speaking so slowly that other people have noticed. Or the opposite – being</i>	If not at all, press 1 If several days, press 2 If more than half the days, press 3	

Frequency	Category	Questions	Responses	Create Variance?
		<i>so fidgety or restless that you have been moving around a lot more than usual?</i>	If nearly every day, press 4	
†Question 9 on the PHQ-9 regarding suicidality was omitted.				